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PUBLIC MEETING  
FOR THE PROPOSED PLAN FOR  
THE HOOKER CHEMICAL/RUCO POLYMER SITE

Oyster Bay Town Hall  
Audrey Avenue, Oyster Bay, New York 11771  
August 15, 2000  
7:00 p.m.

Fink & Carney Reporting  
24 West 40th Street  
New York, N.Y. 10018  
(212) 869-1500

Appearances:

Kevin M. Lynch, Chief, Western New York  
Remediation Section

Cecilia R. Echols, Community Involvement  
Coordinator

William Gilday, New York State DOH

Stephen Scharf, New York State DEC

Kent S. Sorenson, Jr., Project Engineer

Marla Wieder, Esq., EPA Assistant Regional  
Counsel

1  
2 MS. ECHOLS: Good evening. We're ready  
3 to start.

4 My name is Cecilia Echols, and I'm with  
5 the U.S. Environmental Protection Agency and I'm  
6 the Community Relations Coordinator for the  
7 Hooker Chemical/Ruco Polymer site located in  
8 Hicksville.

9 On our agenda today I'll be your  
10 moderator, and we have Kevin Lynch, he is the  
11 Chief of the Western New York Remediation  
12 Section; we also have Marla Wieder, she's the  
13 Assistant Regional Counsel; we have Kent Sorenson  
14 with Integrated Earth Sciences; Steve Sharf and  
15 Walter Parish with D.E.C.

16 The purpose of the meeting today is to  
17 discuss EPA's alternatives for the groundwater  
18 clean-up at the site. The community relations  
19 program is a program where we have the decision  
20 making process from you all, and we bring you  
21 all into helping us clean-up the site, so we  
22 like to hear back and forth from you during  
23 different stages of the clean-up of this site.

24 We have an information depository, if  
25 you're looking for any information pertaining to

1  
2 this site you can always go to the Hicksville  
3 Public Library.

4 Once we receive all comments here at the  
5 meeting or in writing, there will be a response  
6 summary developed, and then, hopefully, a record  
7 of decision will be signed by the regional  
8 administrator.

9 We have a stenographer here, at the end  
10 of Kevin's presentation we will open up for  
11 question, and please state your name clearly so  
12 he can get it accurate for the record.

13 I hope everyone signed in so I can add  
14 you to the mailing list and give you an update  
15 on what's happening at the site.

16 MR. LYNCH: As Cecelia said, my name is  
17 Kevin Lynch, I'm one of the section chiefs at  
18 the Superfund branch in New York City. What I  
19 will do is give a quick synopsis of the law, the  
20 Superfund law we work under, a history of how it  
21 came about, a quick runthrough of our regu-  
22 lations require us to address the site, then a  
23 summary of the proposed plan, a summary of what  
24 we found out at the site, and run through the  
25 alternatives we've looked at, to the remedial

1  
2 alternatives to remedy the situation, and then  
3 we'll present the final alternative and look for  
4 your comments on it.

5 In 1979 a number of environmental  
6 disasters occurred, the best of which is Love  
7 Canal, where people found that they were on an  
8 abandoned hazardous waste site. Another one you  
9 may be familiar with was the chemical control  
10 site in Elizabeth, New Jersey, which was  
11 supposed to be a hazardous waste incinerator,  
12 but they never burned anything, they just  
13 collected drums from people, took the money,  
14 they collected tens of thousands of drums that  
15 did catch fire one night.

16 The Federal Government discovered this  
17 time that they had no way to address  
18 environmental disasters; the Love Canal was  
19 addressed was through a presidential declaration  
20 just similar to a declaration of disaster for a  
21 hurricane. So in 1980 congress passed the  
22 Comprehensive Environmental Response Compensa-  
23 tion and Liability Act, the acronym is CERCLA.

24 And what this act did, it gave us  
25 authority to take actions at hazardous waste

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2 sites in environmental emergencies, it let us  
3 take actions in two different ways. One, it let  
4 us take an emergency response action, this would  
5 be an action to take where, if something was on  
6 fire, we could pay to put it out, if we discover  
7 a warehouse full of drums that is a fire hazard,  
8 we can clean that warehouse out of drums, when  
9 we find a community with a heavily contaminated  
10 water supply we can supply alternate water.

11 They've created a way for pay for this,  
12 they created, at that time it was a 1.6 billion  
13 dollar fund, which was called the Superfund,  
14 which is what the law is commonly called, the  
15 Superfund Law. That's a lot of money, but there  
16 were a lot more sites out there than anybody  
17 thought there were, so the money doesn't go that  
18 far to clean up these site.

19 The law also gave us another way to  
20 approach it, to have someone else pay for the  
21 site, and that's how they get what is called the  
22 potentially responsible party pay for that. And  
23 that can be the people who either owned or  
24 operated the site, it can be the generator of  
25 the hazardous substances that are causing the

1  
2 problem at the site, or it can be the trans-  
3 porter who brought those hazardous substances to  
4 the site.

5 In addition, we can have any of those  
6 people perform the studies and the cleanups, or  
7 what we can do is we can go spend the money  
8 from the Superfund, and then we have the  
9 authorization to go after them to recover the  
10 money that we used to pay for it.

11 Besides these emergency removal sites, we  
12 have the authority to do what we call a remedial  
13 site. What this is, these are for the bigger,  
14 long term clean-ups, looking for a more  
15 permanent clean-up. When the site is  
16 discovered, most of the sites that we get are  
17 referred to us by the state. We do what's  
18 called a preliminary assessment and a site  
19 investigation, which is gathering the  
20 information that already exists on the site, the  
21 state usually has a lot of information as to why  
22 they think the site is a problem; the site  
23 investigation, we can go out and take samples of  
24 the waste, of the hazardous substances to try to  
25 determine what's out there. We also get

1  
2 information as in where the closest water supply  
3 it, what the population is; this all goes into a  
4 mathematical formula and it comes out with a  
5 number. If it gets above a certain number it  
6 goes on the National Priorities List, the  
7 national priorities list is trying to arrange  
8 the sites so that we would address the worst  
9 sites first, if it goes below that number it  
10 goes back to the states, and the states usually  
11 handle it, New York State handles it with the  
12 state Superfund.

13           Once it gets on the National Priorities  
14 List and we can spend Superfund monies to clean  
15 up the site, we then do what we call a remedial  
16 investigation and a feasibility study. The  
17 remedial investigation is a study where we go  
18 out, take samples of the soil, take samples in  
19 the surrounding community and on the site, take  
20 samples of any waste or hazardous substance on  
21 the site, we also put in monitoring wells to  
22 measure what's in the groundwater and to find  
23 out where the groundwater is moving.

24           What we're looking for is we're looking  
25 for what's on the site, where is it going and



1  
2 what problems is it causing, what are the  
3 potential problems it can cause if it hasn't  
4 caused them yet.

5 We then move into the feasibility study  
6 stage, and what the feasibility study is, it's a  
7 study of various alternative solutions to the  
8 site that we compare to one another and we use  
9 criteria that the regulations require us to look  
10 for to compare one site on the other.

11 There are nine criteria, the first one is  
12 overall protection of human health and the  
13 environment; we are not allowed to select a  
14 remedy that doesn't protect human health.

15 Compliance with ARARs is the second, and ARAR is  
16 an applicable or relevant and appropriate  
17 standard of regulation. What this means is  
18 there are regulations out there that you have to  
19 follow that are directly applicable to whatever  
20 you are doing. For instance, if you're  
21 discharging water there are water regulations  
22 that you have to follow.

23 We obviously have to follow those, but  
24 this make us go one step further. If there are  
25 regulations that would make sense that we do

1  
2 follow, but since this doesn't fit in the exact  
3 nitch that the law was written for, we still  
4 have to follow them.

5 We look at the long-term effect in this,  
6 we're looking for something that is going to  
7 work in the long-term, we don't just want to put  
8 a bandaid and walk away from it and have a  
9 problem crop up later. We look for the  
10 reduction of toxicity, mobility or volume at the  
11 site by treatment. We also look at the short  
12 term affect, and what we look at there is we  
13 want to make sure that what we do doesn't cause  
14 a bigger problem in the short time while we're  
15 trying to solve a long term problem. An example  
16 of this is you don't want to do things, like dig  
17 things up and expose the population to it that  
18 could cause problems because you dug it up that  
19 didn't exist if you treated it some other way.

20 Implementability. It has to be something  
21 we can do. It sounds like a great idea, but if  
22 you can't go out there and do it it's not going  
23 to work. We look at cost, we look for the state  
24 acceptance and we also look for community  
25 acceptance.

1  
2           How we determine if we have community  
3 acceptance is the process we're going through  
4 today. We take the information, we put it into  
5 a proposed plan, we propose that proposed plan,  
6 hold a public meeting and look for input from  
7 the public. That input is both in the form of  
8 comments that you will give us today and also in  
9 written comments.

10           The proposed plan is in the back, if you  
11 don't have a copy you should get one, and in the  
12 proposed plan is the address and the name of the  
13 person you should be sending written comments  
14 to, and we encourage you to send those comments.

15           The Hooker/Ruco site is a 14 acre site in  
16 Hicksville. It is bordered on New South Road  
17 and the railroad, immediately to the east of it  
18 is another hazardous waste site, the Grumman  
19 site. It didn't come out that well in the  
20 slide, but it is the largest site outlined in  
21 the green, and the Site Number 3 here is the  
22 Navy site, which is another hazardous waste  
23 site. Neither of these sites are National  
24 Priority List sites, they are being addressed  
25 under the state authority, under the State

1  
2 Superfund. We are coordinating our actions with  
3 them, but the site we are here to talk about is  
4 the Ruco Site.

5 The facility began operations in 1945,  
6 and they continued in operation, what they do is  
7 they manufacture resins and polymers, basically  
8 raw material that others take and make plastics  
9 and a lot of other consumer items from. It's  
10 been operating, as I say, since 1945. When it  
11 commenced operation, and up until the '70s, it  
12 disposed of its waste through various sumps on  
13 the site. Since 1975, however, all of the waste  
14 from the site has either been treated on the  
15 site or shipped offsite for treatment and  
16 disposal.

17 The site was placed on the National  
18 Priorities List in 1986. In 1988 the Occidental  
19 Chemical Corporation, which is the former owner  
20 and operator of the site, agreed to do the  
21 remedial investigation feasibility studies at  
22 the site.

23 The remedial investigation found a number  
24 of things. The first thing it found was an area  
25 of PCV contamination around the pilot plants and

1  
2 around sump 3. These are elevated levels of  
3 PCVs we felt were hazardous to the workers in  
4 the plant; the plant is totally fenced and not  
5 accessible to the public, so we didn't think it  
6 was a public problem, but it was a problem that  
7 we addressed by doing a feasibility study on  
8 this specific problem.

9 What we will do on most of our sites is  
10 we will break them up into what we call operable  
11 units, we'll go out and design a study to find  
12 out what's at the site, but when we find things  
13 out, and if it's something that we can split out  
14 and take an action on, we like to do that of  
15 waiting for the entire, for everything to be  
16 known about the site, because that can and does  
17 take years. We did that in this site, we did a  
18 focus feasibility study we at a public meeting,  
19 we made a decision to excavate the PCB  
20 contaminated soil, dispose of it offsite, there  
21 are some 3,200 tons of contaminated soil were  
22 disposed of in a TOSCA regulated landfill and  
23 about 800 tons were incinerated, 800 tons of the  
24 most highly concentrated PCVs.

25 We also found other areas of contamina-

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2 tion, soil contamination at the site. We found  
3 in an area where drums with formerly disposed of  
4 there was some residual contamination, in an  
5 area close to sump 3 there was also another area  
6 of contamination, and in sumps 1 and sumps 2  
7 there was soil contamination, the first two were  
8 near the surface, and the sumps, they were much  
9 deeper. The contamination here is a solvent  
10 contamination, it consists mostly of tetra or  
11 perchlorethylene and trichlorethelene and a  
12 number of other volatile organics and semi-  
13 volatile organics are in there.

14 What was also found, though, which is  
15 more significant, is that there was significant  
16 groundwater contamination that has moved off the  
17 site. The chemicals that we'll be talking  
18 about, we found various chemicals out there, but  
19 the three big actors that are out there are  
20 vinyl chloride or VCMs, vinyl chloride monomer,  
21 perchlorethylene and trichlorethylene.

22 The reason why these are the three  
23 biggest actors at the site is the perchlor-  
24 ethylene and the trichlorethylene is mostly what  
25 the contamination is, there's more of that than

1  
2 anything else that's out there; we found some  
3 other chemicals that we'll be addressing as we  
4 address these, but these are the ones we're  
5 following the most.

6 The perchlorethylene and the trichlor-  
7 ethylene, as I said, because it's the most out  
8 there, the vinylchloride is also significant  
9 because it's very toxic and you have to handle  
10 it differently than you do the perchlorethylene  
11 and the trichlorethylene.

12 The contamination has moved off the  
13 site-- I don't know how well you can see it in  
14 this slide-- the Hooker/Ruco is up in this other  
15 corner here, the other sites are around it.  
16 This is trichlorethylene in the groundwater and  
17 where it was in 1999. This is a compilation of  
18 the data from all three sites wherever it was  
19 found.

20 When the groundwater moves off the Ruco  
21 site, while Grumman was operating they were  
22 taking a lot of water out of the aquifer for  
23 their production, they were averaging more than  
24 6,000 gallons per minute, and that had a big  
25 influence on all of the groundwater around it.

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2 When the groundwater would move off the site it  
3 would tend to be pulled over to Grumman, where  
4 it would mix with the contamination from the  
5 Grumman and Navy site, and there's trichloro-  
6 ethylene and perchlorethylene, once it mixes up  
7 like that, you don't know who's contamination is  
8 who's, so it's just one big regional problem.

9 The general groundwater flow in the area  
10 is to the south. So if there's no one out there  
11 pumping, anything you put into the aquifer  
12 should be moving down. The pumping in the  
13 Grumman only accentuated that from the Ruco  
14 site, it pulled it down and more to the south.

15 We had made a decision, we slid off the  
16 site into another operable unit, we had made a  
17 decision to address the soil contamination and  
18 some of the groundwater contamination, the soil  
19 contamination by excavating those two surface  
20 areas, the deeper sump contamination we were  
21 going to address by flushing water through that  
22 and collecting it on wells that we were going to  
23 put in right at the edge of the Ruco property;  
24 this is to prevent anymore contamination from  
25 leaving Ruco and to collect that groundwater



1  
2 that we're going to put in to clean the things  
3 out of the lower sumps.

4 What we also needed at that time was more  
5 information, moving to the west of Ruco, as to  
6 where the contamination was. As I said, we  
7 expected that it would move south and move to  
8 the east, but we had not defined a clean line to  
9 the west of the site. So we also went out to  
10 the west of the Ruco site and put in another  
11 series of monitoring wells to make sure that the  
12 theory was right and things weren't moving off  
13 to the western direction.

14 As we were doing that, the state came to  
15 us and had some suggestions how we could better  
16 coordinate the studies at the two sites. At  
17 that time they were discussing with Grumman the  
18 installation of what they call an interim  
19 remedial measure. This is a measure that's  
20 designed to go out and prevent the problem from  
21 getting any worse, hopefully make the problem  
22 better. What they were discussing is putting in  
23 a series of wells, or actually they're existing  
24 wells, but pumping these existing wells, there's  
25 well GP-1, there's CNCT-1, 2 and 3, and pumping

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2       them and treating that groundwater so to prevent  
3       anymore migration of contamination from the  
4       Grumman site, it what this will do and what it  
5       is actually doing, it is in place and working  
6       now, and it is preventing any of the  
7       contamination from all three sites from moving  
8       south down through the aquifer.

9               The Ruco site presented a problem with  
10       this, though, is that Ruco does have a-- this is  
11       contamination that's coming out, the chemicals  
12       the vinylchloride that I mentioned before acts  
13       differently than the perchlorethylene and the  
14       trichlorethylene. Again, this scale is tough to  
15       see this, but the Ruco site is here and the  
16       small green area is a plume that contains vinyl-  
17       chloride. As I say, most of the contamination,  
18       you can't tell one from the other, but this is a  
19       plume that comes out of vinylchloride that you  
20       can attribute to Ruco alone. It hasn't moved as  
21       far off the site because of the properties and  
22       because of how it reacts in the environment, but  
23       the problem it does present is that it cannot be  
24       treated the same way as you treat the perchlor-  
25       ethylene and the tetrachlorethylene.

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2 The treatment that is used in the IRM is  
3 water is collected in the four wells, it is then  
4 sent to a treatment system where the treatment  
5 used is air stripping. The water comes to the  
6 surface where you pass water, an air stream  
7 through the water, and what happens is the  
8 chemicals volatize into air from the water, you  
9 then collect the air in a carbon treatment unit,  
10 the chemicals cling to the carbon, the air comes  
11 out clean, the water comes out clean, and you  
12 dispose of or regenerate the carbon.

13 The problem with vinylchloride is that it  
14 doesn't adhere to the carbon the way the  
15 tetrachlorethylene and perchlorethylene does, so  
16 that if the vinylchloride migrates down to these  
17 wells and into that system, it would go through  
18 the system without being treated and would be  
19 exposed to the air and discharge to the air  
20 above standards, and this would create an  
21 unhealthy situation. So what we decided to do  
22 about this is that we decided since basically  
23 the problem on all three sites has mixed  
24 together, is that the EPAs feasibility study  
25 will concentrate on that vinylchloride plume,

1  
2 and remediating that problem where the state's  
3 feasibility study will look at the bigger  
4 picture of the plume that has extended down the  
5 entire length of the site.

6 We've looked at a number of different  
7 alternatives for the vinylchloride plume. One  
8 of the things that we have to look for through  
9 the regulations is a no action alternative. We  
10 have to look and see what happens if we don't do  
11 anything out there, are things going to get any  
12 worse? Well, we've looked at this, and as we  
13 said before, we know that this isn't protective  
14 because it's a vinylchloride, when it gets down  
15 to these wells it will create an unacceptable  
16 risk. What it also, then, has us do is compare  
17 all of the other alternatives, this is the  
18 baseline of what happens if you do nothing, and  
19 you look at other alternatives where you do take  
20 an action.

21 The first alternative we looked at was a  
22 pump and treat alternative. The technology is  
23 similar to the IRM that's operation now. The  
24 vinylchloride is depicted by these irregular  
25 circles, what they are in different depths of

1  
2 the aquifer. We would put one into the most  
3 concentrated area and two wells at the leading  
4 edge of the plume. We'd pump those wells to  
5 contain the plume and collect the contamination,  
6 pipe it back up to the Ruco facility where we  
7 would build a treatment plant, we would use a  
8 different treatment system, and it would be one  
9 that would burn off the vinylchloride so it  
10 wasn't put out into the air; the air discharge  
11 and the water discharge would meet all  
12 applicable standards. And this would also, we  
13 wouldn't just be cleaning up the vinylchloride  
14 with this, we would be cleaning up any  
15 contamination that would be in this area, in  
16 this small area. It would still need this IRM  
17 to operate to take care of the rest of the  
18 problem.

19 In order to clean up the vinylchloride to  
20 drinking water standards, which are the  
21 standards that we use for the water in the  
22 aquifer, the idea of anything we do here is  
23 we're trying to restore that aquifer to drinking  
24 water quality, and to do that we calculated that  
25 we will have operate this system for 30 years

1  
2 and it would cost some 13 million dollars to do  
3 so.

4 The other alternative we're looking at is  
5 a bioremediation alternative, and what the  
6 bioremediation is is taking advantage of  
7 nature's ability to clean itself, and we look  
8 out there and see what can we do to help it.

9 There's a natural process of breakdown in  
10 chemicals when they get in the environment, this  
11 is the chain of tetra of perchlorethylene, what  
12 it would, if it goes through its whole process,  
13 breakdown to. What we've done is gone out into  
14 the vinylchloride plume and measured what's out  
15 there to try to determine is this happening?  
16 Well, since there have been perchlorethylene and  
17 trichlorethylene, vinylchloride and to some  
18 extent the dischlorals, you really can't tell  
19 one is coming into the other because there's so  
20 much out there.

21 One thing we have seen, though, is that a  
22 ethene and ethane out there, but it wasn't  
23 discharged out there, so we believe the vinyl-  
24 chloride is breaking down. And how this  
25 breakdown, it's a natural process, but the

1 process is done in the presence of oxygen.  
2  
3 Basically there's a bacteria that will digest  
4 the vinylchloride, but they need air to breathe  
5 in order to work, so they are breaking it down  
6 some, but they're also using the air that's in  
7 the formation, when the air is gone, the oxygen  
8 is gone, well, it stops working and the  
9 vinylchloride continues to migrate.

10 The technology that we looked at is  
11 something called biosparging, and what that is  
12 is that you replace that air that is lost. The  
13 points in the plume now are wells, but what they  
14 are they are injection wells. The idea is that  
15 you place wells into the area that has the  
16 vinylchloride and you inject air to replace the  
17 oxygen that's being digested by the micro-  
18 organisms. You go out and do this in steps,  
19 you do a pilot study first, you put in a series  
20 of wells, three to six wells, and you vary the  
21 amount of air you put in until you can measure  
22 what kind of an effect you have, how many wells  
23 you have to put in, how far can you push that  
24 air. You also, though, have to be careful that  
25 you don't put too much air in, because what you

1  
2 don't want to do is rush air through this and  
3 work like an airstripper that can take the  
4 vinylchloride out of the water and then put it  
5 up into the soil gas and thus into the  
6 atmosphere. So you go out there and study on a  
7 small scale to find out what's the best  
8 parameters, you design the full scale study and  
9 you operate it.

10 And this, though, only addresses the  
11 vinylchloride, the TC, PCE that's in this plume  
12 also, then, would rely on the IRM to full  
13 remediation. In order to remediate the vinyl-  
14 chloride so that it will not get down to these  
15 wells in a level that would cause a problem, we  
16 think it would take 10 to 12 years, and this  
17 would cost about three and a half million  
18 dollars.

19 We've taken those alternatives and once  
20 again gone through those nine criteria that  
21 we talked about before. And when we've gone  
22 through those criteria we've come up with a  
23 proposed plan, a suggested alternative that we  
24 believe should be selected for the site, and  
25 that is the air sparging alternative. When you



1  
2 look at both alternatives they both are  
3 protective of human health and the environment.

4 One thing that I neglected to mention, I  
5 forgot to mention when I told you about the  
6 state's IRM, that was the second IRM that was  
7 done at this site. Earlier, what they did, the  
8 Navy and Grumman, through the state did, is they  
9 made available treatment to the Bethpage wells  
10 that were downgrading from the site to make sure  
11 that no one would be drinking contaminated water  
12 from the Bethpage wells, some of the deep plume  
13 has reached some of those wells, but all the  
14 wells do have treatment on them.

15 So currently the risks that are out there  
16 are all potential risks because no one is  
17 drinking contaminated groundwater. But as the  
18 overall protection of human health in the  
19 environmental, both the air sparging and the put  
20 and treat are equally protective, they rely, a  
21 lot of it, though, on the IRMs that are out  
22 there, also. The compliance with ARARs, they  
23 are both designed to meet all air emission  
24 standards, all water discharge standards and  
25 eventually they're designed to clean up the

1  
2 aquifer to drinking water standards. The  
3 long-term effectiveness and permanence-- for  
4 anything to be long-time out there, it's things  
5 are going to have to be operating and pumping  
6 and controlling that plume somewhat for 30  
7 years. So in that they're both pretty much  
8 equal on both of those.

9           The reduction in toxicity, mobility of  
10 volume through treatment. Well, they both reduce  
11 the toxicity through treatment. The biosparging  
12 will be reducing the toxicity of the  
13 vinylchloride by the bioremediation, the pump  
14 and treat, though, does reduce the toxicity of  
15 more chemicals since it treats everything in  
16 that plume of vinylchloride, not just the vinyl-  
17 chlorides.

18           The short term effectiveness, we think  
19 this air sparging has an advantage in the short  
20 term effectiveness as you're not bringing  
21 anything up to the surface to treat it; what  
22 you're doing is you're treating it down in the  
23 subsurface where no one is being exposed to it.  
24 The pump and treat alternatives bring the water  
25 with the contamination up to the surface.

1  
2 Although we don't think it's a real big risk,  
3 pump and treat systems are out there and have  
4 been used for years and they're operated very  
5 safely.

6 Implementability, it's actually easier to  
7 go out in the field and put in the bioparging  
8 unit, it takes less equipment, you bring  
9 equipment right to the area where you're going  
10 to be doing bioparging, the wells are easier to  
11 put in, they're smaller wells. The pump and  
12 treat system, you have to put in the wells and  
13 then you have to put in the associated piping to  
14 bring it up to the facility, and you also have  
15 to build a treatment plant. So the bioparging  
16 can be installed quicker, and it's a little bit  
17 easier to implement; it is a little trickier,  
18 though, to operate, because as I said, you have  
19 to continually monitor it to make sure that you  
20 are putting enough air in so that the system is  
21 working as it's supposed to, but you're not  
22 putting too much air in that you're blowing the  
23 vinylchloride up to the service.

24 Both of these remedies include  
25 monitoring. Either remedy that we would choose

1  
2 we would install monitoring wells, downgrading  
3 that vinylchloride plume for a couple of  
4 reasons, one is to make sure it's working.  
5 They're both designed to stop the vinylchloride  
6 plume from migrating down to those others wells,  
7 the monitoring wells that were put in will  
8 measure the air so we know we're not being  
9 successful, and the other thing it does, it  
10 gives an early warning to those wells  
11 downgradient, where if these don't work the the  
12 vinylchloride continues to migrate to those  
13 wells, well then you can put treatment systems  
14 on those wells before the vinylchloride is  
15 brought up to the service and put out into the  
16 air.

17 The cost, the biosparging has a big  
18 advantage in cost, it costs 3-1/2 million  
19 dollars versus 13 million dollars for that treat  
20 remedy.

21 But getting back to the implementability  
22 of it. The biosparging is an inovative  
23 technology, this isn't something that's been  
24 around and being used for a long time, it's  
25 being used more and more in sites around the

1  
2 country, people are finding out that this works  
3 and that it's effective. But in the region, we  
4 don't have one yet, but we have completed it and  
5 walked away and said we have been successful.

6 So what we're recommending is that we  
7 choose the bioremediation, but there's a  
8 contingency in our remedy, and what that  
9 contingency is is that we would go out and  
10 design the remedy, implement the remedy and then  
11 monitor it very closely, and if the vinyl-  
12 chloride does not stop the drop as designed in a  
13 pretty short timeframe, we would then go right  
14 ahead and put in that pump and treat technology.

15 So it's something where normally if we  
16 would pick a remedy and it doesn't work, we  
17 would then have to go back through the system  
18 and go to the proposed plan together, look at  
19 the-- do a feasibility study and a public  
20 meeting. In this what we would say is we're  
21 going to do it, we believe that this will work,  
22 but if it doesn't we won't hesitate to go to  
23 pump treat.

24 The state acceptance, the state has  
25 concurred with our approach, especially the

1  
2 contingency approach, they think it's the right  
3 way do do this, they think it's a good mix with  
4 us taking care of the vinylchloride, with the  
5 biosparging while they address the larger plume.  
6 They also like the idea, though, of a con-  
7 tingency that if this doesn't work we can get  
8 out there more quickly than we normally would in  
9 order to put another remedy in.

10 And the community acceptance is what  
11 we're looking for today, we're looking for your  
12 comments, for your questions, as I said, both  
13 comments here at the meeting and written  
14 comments will come in. There is a depository  
15 that Cecilia mentioned in the Hicksville Library  
16 that if you want to know in more detail the  
17 studies that have been made and look at those  
18 studies and have comments on those, we would  
19 also encourage you to do that.

20 At this point I would like to open the  
21 floor to any comments or questions.

22 MR. SIDOWSKI: My name is Joe Sidowski.

23 On your figures, which would be your  
24 Exhibit Number 1, if you go to 4.2, you come up  
25 with Regional Ground Water Division. Do you

1  
2 have 1 up there?

3 MR. LYNCH: Is this from the proposed  
4 plan?

5 MR. SIDOWSKI: Yes. I got all of them.

6 MR. LYNCH: Okay.

7 Which figure are you referring to?

8 MR. SIDOWSKI: On the bottom you have the  
9 plan GNWA001, July 21, 2000, that would be the  
10 numbers on the page. Figure 4.2.

11 Where I'm going here is regional  
12 groundwater divide.

13 Now, we have the approximate location of  
14 the study area. Now, the approximate location  
15 of the study area where we have contamination is  
16 about a mile away from this regional groundwater  
17 is divide. Now the regional groundwater divide  
18 would be in area where there is no obstruction  
19 and water would go down to the Lloyd quarry,  
20 that's the main quarry, this is above bedrock.

21 Now, you have in here papers that  
22 contradict one after another; I don't know if  
23 you've gone over these page by page.

24 MR. LYNCH: I have actually.

25 MR. SIDOWSKI: I've been studying this

1  
2 for the last week.

3 If you put up on your screen, you will  
4 find drawings number 1 to show the public that  
5 GNWA002, July 21, 2000.

6 MS. ECHOLS: Excuse me, sir. What are  
7 your reading from?

8 MR. SIDOWSKI: What am I reading from?  
9 Your book.

10 MR. LYNCH: There's a number of things  
11 that are out there.

12 MR. SIDOWSKI: We have--

13 MR. LYNCH: This is not the proposed plan  
14 we brought today.

15 I do know the figure you're talking about  
16 in the regional groundwater divide, but it's not  
17 in the proposed plan that we sent out this time.

18 MR. SIDOWSKI: Operable Unit 3, we got  
19 Hooker Chemical Ruco In Hicksville. It's the  
20 big book.

21 MR. LYNCH: Okay.

22 MR. SIDOWSKI: We can go to the small  
23 book now.

24 MR. LYNCH: Because the regional ground  
25 water divide is the area where, in Long Island,



1  
2 the groundwater when the ran falls, it either  
3 runs to the ocean or to the sound.

4 MR. SIDOWSKI: Right.

5 MR. LYNCH: And that is in here to show  
6 where this is in relation to the regional flow.  
7 That's why we believe that the flow in this area  
8 should be to the south, to the ocean.

9 MR. SIDOWSKI: Should be.

10 MR. LYNCH: Yes.

11 MR. SIDOWSKI: We have contaminates.  
12 According to this report, running to the west,  
13 according to the report, at different levels; at  
14 200 foot levels, at 250 foot levels, each one  
15 keeps changing.

16 Now, if you go over to drawing number 1,  
17 again GNWA002, you will find on one if your test  
18 wells, N5390, if you get to that.

19 MR. SCHARF: If I could interject for a  
20 second.

21 I'm Steve Scharf, New York State DEC.

22 One of the problems with the site is that  
23 there are three different sites rolled into one,  
24 and there are monitoring wells that are  
25 installed by the Navy, monitoring wells

1  
2 installed by Northrup Grumman, monitoring wells  
3 installed by Occidental, and there are different  
4 reports and different samples at different  
5 times, sometimes it can get very confusing. I  
6 think the N wells are Nassau County wells, those  
7 are associated with wells that are put in by the  
8 county to monitor the groundwater.

9 MR. SIDOWSKI: Then we're dealing with an  
10 N well here, then?

11 MR. SCHARF: Right; that N well.

12 Now, you mentioned something about some  
13 figures showing the groundwater moving  
14 east-west, others north-south, others showing  
15 the contamination moving down. I think one of  
16 the things that Kevin had mentioned is that over  
17 the last decade, as the Grumman facility shut  
18 down, they changed the rate at which they were  
19 extractin groundwater. Back in, let's say they  
20 had full production in 1990, they were pumping  
21 out, what was the rate, about 6,000 gallons a  
22 minute, and what happened is a lot of the  
23 contamination, rather than moving the normal  
24 flow, was moving either directly down or moving  
25 to the east, towards the Navy facility, and that

1 ended up drawing some of the vinylchloride onto  
2 the Navy property and Grumman property. That's  
3 where you may be getting confused--

4  
5 MR. SIDOWSKI: No, I'm not getting  
6 confused, you didn't hear where I'm going yet.

7 MR. SCHARF: You're right, I shouldn't  
8 say "confused."

9 MR. SIDOWSKI: I'm using that particular  
10 well right now as reference.

11 That particular well, going down to the  
12 150 foot mark, 135 foot mark, you have dense  
13 clay, and that runs down from 35 to 45 feet.  
14 Now, this is at a peak, this is at the east side  
15 of the Hooker site, and right in the middle of  
16 the Hooker site you have the drain line, the  
17 movement line where your water goes down.

18 MR. LYNCH: Actually no, that isn't in  
19 the middle of the Hooker site, that is to the  
20 north of the Hooker site.

21 MR. SIDOWSKI: It's right here; that's  
22 why I said put it up and you'll see.

23 MR. LYNCH: I don't have an overhead of  
24 everything.

25 MR. SIDOWSKI: Anyway, that's running

1  
2 back towards our plant over on Murray Road; now  
3 that is only one quarter of a mile away from  
4 this particular site. I know, I live on Murray  
5 Road.

6 All through this book you find where,  
7 whoever did the report, you will find that plant  
8 number 9, Elisia Street, is on the west side of  
9 the railroad. According to the information in  
10 this book we have plant number 9 sitting east of  
11 the railroad. This is just one incident.

12 When dense clay is involved, and, of  
13 course, we all know water runs like a root to  
14 find it's easiest path, and it won't move. You  
15 can drill holes all day long and not find it,  
16 but then you'll find it. When you get into one  
17 of these roots, one of these pools, you'll be  
18 able to test, and when you test you'll be able  
19 to get levels.

20 Now, going into a time when we have heavy  
21 rain, okay, the contaminants can only spread,  
22 because you have a 35 foot dense clay backup  
23 from the top of that underground river going  
24 north or upward; right? That would mean that  
25 all that water can only run back to the north,

1  
2 over the lip and come back down towards the  
3 centerline. This is the very threatening study,  
4 I enjoyed it.

5 MR. LYNCH: I think you're misinterpret-  
6 ing the data that is in the study, though.

7 MR. SIDOWSKI: That is what?

8 MR. LYNCH: I think you are misinterpret-  
9 ing the data that is in this study.

10 MR. SIDOWSKI: According to a couple of  
11 people, we've been been sitting down and reading  
12 these thinks, we have the site here, you have  
13 the site map on your next page here of all of  
14 Long Island, Figure 4.3.

15 MR. LYNCH: It's very hard for me to  
16 follow--

17 MR. SIDOWSKI: You are here to fix the  
18 problem that we have, and we have a problem with  
19 contaminated water in our main quarry; okay,  
20 because of this own report here that clearly  
21 shows regional groundwater division, our polluted  
22 problem is right next to it, and that's the only  
23 place where the water can actually go straight  
24 down, start to divide, or then therefore divide.  
25 If we are then at that place, on that hill, and

1  
2 it starts to run and starts to wash back the  
3 other way, we have all of Hicksville, upper  
4 Hicksville, all west of Hicksville, and it's all  
5 east of the railroad coming down on the backside  
6 of Bethpage. This is all in your report, and  
7 it's not misinterpretation.

8 MR. LYNCH: That is not what's in the  
9 report.

10 MR. SIDOWSKI: Okay. We can go--

11 MR. LYNCH: You're looking at data on  
12 here and you're interpreting it in a different  
13 way than than our geologist interpreted it, and  
14 without looking at the exact figures you're  
15 talking about, I really can't can't comment on  
16 this.

17 MR. SIDOWSKI: We have groundwater--  
18 okay, if you go to page 514, this is your site.  
19 See this page right here. It shows it in  
20 levels. We got 5.14.

21 MR. LYNCH: Okay.

22 MR. SIDOWSKI: We've got seven levels  
23 that drop off of water, and water pools in  
24 veins. As you get down to the last level,  
25 number 7, you have on the west side, you have it

1  
2 falling down into the quarry. Why? Because  
3 we're near the centerline.

4 I dig wells.

5 MR. LYNCH: I'm not a geologist, and I  
6 would like a geologist to interpret this, but  
7 this does not show that the contamination is  
8 going to--

9 MR. SIDOWSKI: You see that little circle  
10 there on the left side?

11 MR. LYNCH: Yes.

12 MR. SIDOWSKI: It says model layer 7. It  
13 has 495 feet to 610 feet. See the little circle  
14 right at the bottom? That shows a pool, the  
15 outside of a pool. And that pool is going west.  
16 As this water is dropping you can actually see  
17 the water falling down towards the west.

18 MR. LYNCH: Actually what this is, this  
19 isn't necessarily a pool. What these lines that  
20 are on this thing are contour lines. What you  
21 do is you look at the different points that you  
22 get, the spots that are there are wells, and  
23 what you try to do is interpret, you look at how  
24 much, what the level is in that spot, that blue  
25 line is the contour of, I think it's a 10 part

1  
2 per billion contour of tetrachlorethylene, and  
3 what you do is you take all of the information  
4 that's out there and you try to make sense of it  
5 to see where things are moving and where it's  
6 gotten.

7 MR. SIDOWSKI: And that shows where it's  
8 traveling. That would mean that the water is  
9 traveling that way.

10 MR. LYNCH: You also look at the water  
11 levels and see which way water is traveling, and  
12 at this area of the site the water is not  
13 traveling to the north, it is traveling to the  
14 south.

15 MR. SIDOWSKI: If you go back to the  
16 original chart that I sent you, it shows you  
17 exactly where the water is traveling on here;  
18 you have to pull that out right here.

19 MR. LYNCH: What was that one, again?

20 MR. SIDOWSKI: Okay. WA002, and that's  
21 drawing number 1, that's the big drawing; that  
22 would be in the back of the book, folded.

23 MR. SCHARF: I think that what you need  
24 to do is look at the overall hydrogeology of  
25 Long Island. In general the clay lens that you



1  
2 are talking about were various deposits over the  
3 glaciation period over the last 100,000 years,  
4 if you want to believe the way layout was  
5 supposed to happen. The permability layers  
6 slant towards the Atlantic Ocean, and in the  
7 area of the Ruco site, the Northrup Grumman and  
8 the Navy site, the ground water is moving to the  
9 the south-south east, general trend. And the  
10 area of deep recharge you're talking about is  
11 further to the north, it's somewhere around by  
12 the Long Island Expressway, and that's got to be  
13 at least 2 to 3 miles to the north. That's a  
14 long distance away, and that's what I was trying  
15 to explain before, it can get a little confusing  
16 when you look at the end result from the wells,  
17 and some of them are taken at different times,  
18 and its hard to figure out a trend. And that's  
19 why, for instance, on the Grumman site we  
20 started up a quarterly monitoring program to try  
21 and get data that's current, and you want to  
22 look at the groundwater elevation data, we put  
23 together the direction the groundwater is  
24 flowing, plus the current condition of the  
25 groundwater, and the geologists have looked at

1  
2 these repots and found that the groundwater is  
3 moving to the south-southeast, especially now  
4 that the Grumman Corporation has stopped pumping  
5 most of the water from their site.

6 And so you're right, that's just a  
7 generalized figure of the overall hydrogeology  
8 of Long Island.

9 MR. SIDOWSKI: You're talking about  
10 contaminated areas is a generalized area, too.

11 MR. LYNCH: Yes. And actually I do see  
12 now that the figure you're talking about is--

13 MR. SIDOWSKI: With heavy rains, any time  
14 that we have storms or heavy rains, what happens  
15 is that would back up, just like a door that  
16 would be closed, that could not hold all of that  
17 water coming down.

18 MR. LYNCH: Yes.

19 MR. SIDOWSKI: We now have a condition  
20 where that water has to spread out.

21 MR. LYNCH: Right. But the one thing on  
22 here, if you look at the rest of them also,  
23 there is not a continuous band of clay that  
24 would prevent the water from coming down, there  
25 would be little pockets here and there, and what

1 happens is the water does go down and go around  
2 it; this is an unconfined aquifer, it is not a  
3 good clay layer-- a good clay layer we'd like to  
4 find because then you could just keep the  
5 contamination on top and catch it. But it has  
6 gone down, and gone down almost to those levels.  
7

8 MR. SIDOWSKI: If we read all the other  
9 ones, the MW-54, MW-55, you read all of them you  
10 can get all the levels of what you have here;  
11 sand and gravel, gravel, sand, right down the  
12 line here, you have a potential hazard to see  
13 which way the water is moving. It's got to go  
14 someplace.

15 MR. LYNCH: And in general it does go  
16 down and it moves through-- this is not a  
17 confined aquifer, it does not move in like a  
18 fractured rock where it could move through one  
19 fracture, this is a general groundwater flow and  
20 the water does flow.

21 MR. SCHARF: Long Island is basically an  
22 underground river full of sand, and the water  
23 that percolates down through the it from the  
24 recharge basins, it takes time to get down  
25 there. The groundwater levels can fluctuate by

1  
2 season, but not that much. Basically in this  
3 area it's about 55 feet, the groundwater, and a  
4 five inch rain hits the recharge basin, the  
5 water slowly works it's way down. So by the  
6 time it gets to the watertable, which is about  
7 60 feet down, it might increase the level all  
8 around on Long Island maybe a foot or two,  
9 depending on where it's being drawn, but overall  
10 the trend is well documented, especially in this  
11 area, it's been well studied in the last ten  
12 years by Northrup's consultants, by Navy's  
13 consultants.

14 MR. LYNCH: So what you're saying is a  
15 plane of clay and the water is going to spill  
16 off.

17 MR. SIDOWSKI: You're right. These are  
18 the people who creating the contaminants.  
19 You're right.

20 MS. ECHOLS: Try and keep your questions  
21 short. If you have any detailed questions could  
22 you just hold them to the end?

23 MR. LYNCH: We can come back and address  
24 this at the end. It's easier to talk about it  
25 with the things in front of us.

1  
2 MR. DEVINE: My name is Dan Devine.

3 I want to thank Mr. Sidowski for being a  
4 concerned citizen and for investigating and  
5 researching the background. I also want to  
6 thank the law for allowing public participation  
7 in this process, and I appreciate you all being  
8 down here.

9 I just have maybe three questions. One  
10 is who makes the decision as far as what method  
11 is decided? I mean I can go down and complain  
12 about the rates of the buses going up, it's a  
13 public authority that makes the decision. The  
14 second thing is what exactly is the product that  
15 vinylchloride is, what kind of products does  
16 vinylchloride make. And three is is Hooker  
17 Chemical Company, are they still making these  
18 products; and then the last question was that  
19 are businesses and is my local government  
20 invited to participate in this sort of thing?  
21 Were they invited to be included and they  
22 decided not to attend?

23 Those are my four basic questions.

24 MR. LYNCH: The first question is who  
25 does make the decision in this case is the

1  
2       Regonal Administrator in New York, he's the head  
3       of the EPA region. All we will do is present to  
4       her all of the data, basically the proposed  
5       plan, and then the record of decision which is  
6       in more detail, we'll also present to her all of  
7       the comments that people have made, all of the  
8       questions they have asked and our responses to  
9       those comments, and also our recommendation,  
10      whether the preferred alternative is the one  
11      we're still recommending or if we change it based  
12      on these public comments. And she will  
13      eventually make that decision.

14           MR. DEVINE: The VCM, the vinylchloride,  
15      what did Ruco make that's made of vinylchloride?  
16      Is that vinyl in cars or what product is made  
17      from that?

18           MR. LYNCH: In the past--

19           MR. SCHARF: PVC pipe.

20           MR. DEVINE: Pipe for plumbing?

21           MR. SCHARF: All sorts of purposes.

22           MR. LYNCH: PVC was a very well used  
23      plastic  
24      that would be in cars and pipes.

25           MR. SCHARF: They also made specialty

1  
2 plastics.

3 MR. DEVINE: So it's all plastics.

4 MR. LYNCH: Right. Right now they're  
5 basically not making the plastics themselves,  
6 what they're doing now is making the raw  
7 materials that someone else is making the  
8 plastic somewhere else.

9 MR. DEVINE: My state senator, is he the  
10 guy that's going to be speaking with the EPA  
11 Administrator, so if I had a question, if I  
12 wanted to lobby for a particular purpose, like  
13 for instance the accuracy of the study, I would  
14 write to the state senator, like Carl  
15 Marcilleno? Is he my state senator?

16 COUNCILMAN EISLER: Excuse me, may I  
17 interrupt you?

18 I'm Counselman Bonnie Eisler from the  
19 Town of Oyster Bay, and I'm here with Counselman  
20 Macagnone, he's also a Councilman from the Town  
21 of Oyster Bay. (Indistinct)

22 MR. DEVINE: That pretty much answers all  
23 my questions. I thank you.

24 MR. LYNCH: Actually the local officials  
25 and also the state and the federal congressman

1  
2 often do comment on these plans and talk to our  
3 administrator all the time, and we will respond.  
4 Believe me, one of the most important things we  
5 get inquiries from the elected officials, they  
6 make sure we respond.

7 MR. GILDAY: My name is Bill Gilday, I'm  
8 with the New York State Department of Health,  
9 and I'd just like to add to that, that the Water  
10 Districts, Bethpage Water District, Hicksville  
11 Water District and Levittown Water District have  
12 been involved on basically what was called a  
13 technical coordinating committee for a number of  
14 years as the regional groundwater was being  
15 studied, and they all were either were in  
16 attendance or had representatives, some of their  
17 consultants, engineering firms were at these  
18 meetings. So the water districts, too, got  
19 involved through the process.

20 COUNCILMAN MACAGNONE: Councilman  
21 Macagnone, Town of Oyster Bay.

22 Recently I'm seeing finally some progress  
23 in cleaning up the Liberty site after 18 some  
24 odd years of promises. What time frame are we  
25 looking at in this project?



1  
2 MR. LYNCH: This project, we have a 30  
3 day public comment period, if it has to be  
4 extended it would be a 60 day public comment  
5 period.

6 COUNCILMAN MACAGNONE: We had that 18  
7 years in Farmingdale also. What's the time  
8 frame?

9 MR. LYNCH: Were intending to sign the  
10 Record of Decision on this site before the end  
11 of September. We then go to the responsible  
12 parties and ask them to perform the remedy. We  
13 have 120 day negotiation period. If they agree,  
14 we then take a little bit more time, probably  
15 another three months to negotiate a consent  
16 order that would be lodged with the court, at  
17 that time we would go into design, design should  
18 take six to nine months in this system, and  
19 after that nine months we would go out and  
20 implement the system. So it would be roughly a  
21 year and a half from now is when we hope to be  
22 out there.

23 COUNCILMAN MACAGNONE: Thank you.

24 MR. LYNCH: Yes.

25 MS. TUECHLER: I'm Irmgard Tuechler. I

1  
2 walked around protesting the plant when it was  
3 still in operation 18 or 20 years ago, also.

4 Has it been going on this long?

5 MR. LYNCH: Well, the site did get listed  
6 on the National Priority List in '86, so we have  
7 being trying to address this for some 14 years  
8 now.

9 MS. TUECHLER: Okay. Just because it was  
10 brought up about Farmingdale, you mentioned  
11 that, but I would like to know what health  
12 studies have been done, the incidents of cancer  
13 in Hicksville and Bethpage, and also how this  
14 relates to the mapping of the breast cancer on  
15 Long Island.

16 MR. LYNCH: The EPA doesn't do health  
17 studies when we're looking at the sites, we just  
18 look at the environmental problems; you could  
19 ask the Health Department.

20 The ATSDR, the agency for Toxic  
21 Substances Disease Registry, does look at these  
22 sites and does do a health assessment, but they  
23 do not go to the level of the study of cancer  
24 incidence or things like that.

25 MR. GILDAY: I'm going to give you a

1  
2 1-800 number and a person's name who can tell  
3 you the various studies that have been done or  
4 in the process of being done in the area as far  
5 as small area studies, I know, related to the  
6 Old Bethpage landfill, there have been two  
7 studies, and that's part of a greater study  
8 about landfill gas. There have also been  
9 studies in South Farmingdale, North Massapequa,  
10 and I know there is a study in the Levittown  
11 area there's been ongoing, it may be nearing  
12 completion. I will give you, in fact I'll give  
13 you two names. One person who knows the local  
14 area studies and one person who's involved with  
15 the cancer mapping initiative in New York State,  
16 and she can answer those questions, either of  
17 those.

18 MS. TUECHLER: You don't know off the top  
19 your head if it's affecting the health of the  
20 people in Hicksville?

21 MR. GILDAY: In order for some health  
22 effects to occur from a chemical there needs to  
23 be exposure to a chemical, and the exact route  
24 of exposure here might be the groundwater  
25 contamination issue through the drinking water

1  
2 supply. Historically some of the Bethpage wells  
3 did have concentrations of volatile organic  
4 compounds in them that were distributed to the  
5 public water district prior to 1976, that's when  
6 testing began, and that's when the science was  
7 actually available to start looking at these  
8 chemical at very low concentrations in the  
9 water. The concentrations at that time were  
10 lower than what the Health Department and some  
11 of the other agencies had as far as the drinking  
12 water guideline. That number has since come  
13 down, and those numbers that people were exposed  
14 to historically in Bethpage are at least  
15 associated with one particular well at one of  
16 their-- I think they had nine well fields  
17 historically. Those concentrations, although  
18 they were below the standard guidelines at the  
19 time, they are above the present drinking water  
20 standards. How long people were exposed or what  
21 concentrations we do not know. It's my  
22 understanding that through a number of the  
23 studies that have been done, there haven't been  
24 any increased incidences of cancer noted in that  
25 area. But one of the things we're doing in New

1  
2 York State, as Kevin mentioned, the ATSDR and  
3 assorted interfaces with the cancer map  
4 initiative. We have a VOC registry, volatile  
5 organic compound register, and people who may  
6 have been exposed or definitely were exposed to  
7 volatile organic compounds for some period of  
8 time, we're putting these people on a registry,  
9 small groups of people or entire communities  
10 that may have been exposed, and over time we'll  
11 be able to see if, in this group or these  
12 groups, where we know there was exposure, if  
13 there is any kind of increased incidence of  
14 various, either cancers or different types of  
15 non-cancerous disease.

16 I'll give you Lorraine Benton's name. In  
17 fact I see people taking notes here.  
18 1 800 458-1158, and do extension 2-- you can get  
19 information about that from there.

20 VOICE: I have a meeting, I believe, like  
21 September 19th.

22 MR. GILDAY: Use extension 2-7530 for  
23 local area studies that have been done or are  
24 being done, ask for Lorraine Benton; and for the  
25 cancer initiative, the mapping of cancer

1  
2 surveillance initiative it would be Gwen  
3 Mergian. And they would be able to speak to  
4 these issues a lot better than I can.

5 You could also call me at extension  
6 2-7880; and my name is Bill Gilday, and I know  
7 more about the nuts and bolts of the contamina-  
8 tion and the site and what's going on, and I  
9 work with Steve of the D.E.C., and we interact  
10 with the EPA, too.

11 So those are the three names and they  
12 would be interested in talking to you.

13 MR. SIMONELLO John Simonello from  
14 Hicksville

15 I have a couple of questions. Number  
16 one, you mentioned a plume of contaminated  
17 water, and what I would like to know in  
18 reference lines of New South Road and Stewart  
19 Avenue and Old Country Road and 107, the width  
20 and length of that plume. That's one part. And  
21 the second part is, as we all know, anybody can  
22 tell you this, PCBs are airborne. Over the  
23 period of all these years has anybody gone  
24 around and taken soil samples of the surrounding  
25 neighborhoods off the site? Because PCBs are

1  
2 airborne, as you know.

3 MR. LYNCH: I don't believe we have taken  
4 any samples off the property, what we do is we  
5 take samples starting with the contaminated area  
6 and go outward until we don't find it anymore.

7 What we've also done now is we have taken  
8 air samples while we are doing this work while  
9 we're putting in wells.

10 MR. SIMONELLO: I'm not talking about air  
11 samples presently, I'm talking from 1939 to 1976  
12 or '45, whenever it started, to 1982.

13 MR. LYNCH: Form 1945 to 1975?

14 MR. SIMONELLO: In 1975 there were  
15 contaminants dispelled into the air, they had an  
16 asbestos brake shop on that road over there,  
17 they had the plastics plant, the Ruco plant.  
18 They've had many different types of operations  
19 there, and Grumman, and whatever came out of  
20 those stacks before they came in with the  
21 filtering systems on the stacks was spread out  
22 on the surrounding community. Now, it goes up,  
23 and it might just clear the boundaries of the  
24 land and then come back down again. Has anybody  
25 done a one mile perimeter around there to check

1  
2 samples? I mean PCBs or whatever in that soil  
3 where people plant their gardens, their children  
4 are playing and digging in the dirt or whatever.  
5 I mean somebody should look into that.

6 MR. LYNCH: We haven't looked into a  
7 widespread sampling of the soil in the neighbor-  
8 hoods, but what we have done is the soil that we  
9 do find on the plant itself, where we would  
10 expect the concentrations to be higher, we find  
11 large areas that are not affected, that do not  
12 have surface contamination. We just found  
13 isolated pockets of surface contamination, and  
14 that has been attributed to spills of the actual  
15 material, not anything that has come through the  
16 air.

17 But we will follow that out until we find  
18 a clean area, and I would expect that if it was  
19 coming down through the air it would be pretty  
20 uniform, and the closer to the stack-- actually  
21 I'm not much in that area.

22 MR. SIMONELLO: It disburses before it  
23 comes down.

24 MR. LYNCH: Okay.

25 MR. SIMONELLO: So you won't find it



1  
2 right in the immediate vicinity, you'll find it  
3 further out.

4 And in reference to that plume, I would  
5 like to know the width and the length.

6 MR. LYNCH: Actually I did leave that  
7 out; I'm glad you brought that up, because it is  
8 very big. The width is approximately 900 feet,  
9 the length is--

10 MR. SIMONELLO: New South Road and  
11 Steward Avenue and Old Country Road and 107 as  
12 reference points if you can give me the size on  
13 that?

14 MR. LYNCH: I'll put back up the map.

15 MR. SCHARF: There is a section in the  
16 report which discusses that. And you have to  
17 remember, as Kevin was presenting the  
18 information that was gathered on the site, is  
19 that the plume from the Ruco facility has  
20 comingled with that of the Northrup-Grumman and  
21 Navy facility.

22 MR. SIMONELLO: I'm not worried about  
23 that, I just want to know the size of the plume.

24 MR. SCHARF: Basically the entire area is  
25 well over a 2000 acres site.

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MR. SIMONELLO: 2000 acres.

MR. SCHARF: Correct.

MR. GILDAY: When you said New South Road and 107, those were good boundaries on the western side. If you go across what used to be the Navy property, over to about Steward Avenue, it's not as concentrated over there, it's less concentrated, but if you follow that south across Central and actually to about the place where there used to be Mid-Island Hospital, maybe, that's about the leading edge of the plume.

MR. SIMONELLO: So you're saying from New South over and out towards--

MR. SCHARF: It's approaching Hempstead Turnpike in the deeper groundwater.

MR. LYNCH: It's close to 600 feet deep, also.

MR. SIMONELLO: Why has it taken 20 years? We heard about the same problem in the Hicksville Public Library 18 years ago. This was all discussed, and they said Superfund is in there, you don't have to worry about it, and 20 years later I'm hearing the same rhetoric, and

1  
2 the plume is getting bigger. I don't understand  
3 it.

4 MR. SCHARF: If I can interject.

5 The thing is, granted, we're here today  
6 and it's taken awhile for us to get to this  
7 point, and this is the final remedy for the  
8 Hooker/Ruco site; okay? There have been other  
9 operable units in addressing that. As I  
10 mentioned, the contaminated groundwater has  
11 comingled with that of the Northrup-Grumman  
12 facility and that of the Navy facility. But  
13 keep in mind, partly just by coincidence, that  
14 the Navy or Grumman, and the Navy facility is  
15 operated by Grumman, has been pumping 14 million  
16 gallons of water a day, and the Grumman  
17 Corporation has been well aware that the  
18 groundwater was contaminated mainly from their  
19 sources and some from other sources. And  
20 starting probably back in the early '80s the  
21 state had approach Grumman to do something about  
22 this, and what they did was they began to clean  
23 up the groundwater that they were using for  
24 non-toxic cooling water. So even though the  
25 contamination has been around in this area for

1  
2 20 years, most of it was contained within the  
3 Grumman facility. That which wasn't contained  
4 was drawn down deeper, where the groundwater  
5 moves slower, and that's what we're tracking  
6 right now with the other site, the Grumman site  
7 and the Navy site, which we'll be addressing in  
8 a public meeting that's coming up in the near  
9 future.

10 So we've known about it for awhile.

11 In addition to that, as Grumman made a  
12 decision and the Northrup Corporation made a  
13 decision to close the Grumman facility, an IRM  
14 was implemented that Kevin talked about to  
15 contain the contamination that's still on the  
16 Grumman site by pumping four wells at the rate  
17 of about 4,000 gallons a minute. And so most of  
18 that area, that's the area under the water  
19 coming off the Grumman site, is being contained  
20 right now.

21 MR. SIMONELLO: You said before that's  
22 the state's problem, that's not Supervisor Fund  
23 problem.

24 MR. LYNCH: It's actually everyone's  
25 problem, but the state is addressing it, we're

1  
2 addressing the Ruco problem, the state is  
3 addressing the Grumman problem under our  
4 separate authorities.

5 MR. SCHARF: Make no mistake about it,  
6 it's a problem, that's why we're here today and  
7 that's why it's a state Superfund and federal  
8 Superfund site; we've been monitoring the  
9 groundwater, and the state, about a year ago,  
10 asked Grumman to put together a quarterly  
11 monitoring program. They were doing several  
12 distinct monitoring programs around the site,  
13 but they put one whole program together to track  
14 what's going on, where the plume is going, and  
15 we see what's on the site it being contained, we  
16 had them do a modeling, a groundwater modeling  
17 to help to prove that, as well as corroborate  
18 that with analytical data data, and that  
19 contamination just passed the site, we are now  
20 going to address, in the upcoming remedy for the  
21 north Grumman site, and that will be a public  
22 meeting which will be, hopefully, within the  
23 next four to six weeks

24 MR. GILDAY: Could I just over a few  
25 things.

1  
2 During the ensuing so many years since  
3 the state got involved, a lot has happened at  
4 the property. Steve mentioned the IRM, the  
5 containment of the worse part of the plume at  
6 the site's southern boundary. Those systems  
7 there he talked about are pumping about 4,000  
8 gallons per minute. If you could see what  
9 they're extracting through the carbon, they're  
10 actually able to extract TCE out of the  
11 groundwater to the tune of probably about one  
12 drum, a 55 gallon drum, per week, maybe every  
13 other week, and that's about 95 percent pure TCE  
14 through the system they have. So they have been  
15 taking a lot of this-- to me it's exciting  
16 because I see real science cleaning up the mess  
17 that has been made, and they're actually  
18 extracting out. So there's a lot of material  
19 that's being taken back out of the groundwater.  
20 Also, the areas where the spillage had occurred  
21 on and around the campus, the 600 acre campus,  
22 both Navy and Grumman, those areas had a lot of  
23 either perchlorethylene or trichlorethylene or  
24 even PCBs in there. They have largely been  
25 remediated by this time; there have been

1  
2 numerous activities going on to clean up what we  
3 call source areas during the last 10, 15 years.

4 Another thing that's been going on, and  
5 this gets to the issue of soil sampling and the  
6 PCB soil sampling, as various portions of the  
7 Grumman properties have been closed out, there's  
8 another program called the RECRA Program. We  
9 primarily are dealing with the Superfund  
10 program, dealing with what we call the hazardous  
11 waste sites. Well, there's been other areas on  
12 the plant that have had contamination that needs  
13 to be remediated. These have been done as  
14 various plants are being closed through the  
15 RECRA program, and we're actually-- the  
16 different program are in communication with each  
17 other, making sure that-- while we don't want to  
18 overlap, we do want to make sure that nothing  
19 falls through the cracks.

20 I can say that there have been literally  
21 thousands of soil samples taken around the  
22 Grumman area, and I've gotten dizzy and  
23 headaches going through this data, looking at  
24 it, in part dealing with the closure of  
25 potentially contaminated areas.

1  
2           There has been, in the past, I believe it  
3 was '95, when we were dealing with one of the  
4 more contaminated PCB area on the site, that was  
5 part of Plant 3 that the Nave has. When we  
6 realized that this was towards the eastern end  
7 of the plant we have actually did, the State  
8 Health Department went into some of the yards  
9 near that property, and the good news is we  
10 didn't come with PCBs in the yards there. The  
11 bad news is that on the plant there's a lot of  
12 PCB contamination, and that's the subject of an  
13 entire another remedial action that the Navy and  
14 Grumman are implementing now.

15           There's also some other studies going on,  
16 some PCB contaminated areas that Grumman is  
17 actually delineating, the extent of it, how much  
18 they're going to have to do. There has  
19 definitely been a lot of soil sampling  
20 throughout what I call the campus, the Navy  
21 Grumman campus, and wherever we see that data  
22 getting close to the public, their homes, to  
23 parks or whatever, we say you got to go offsite,  
24 you got to take the soil samples and make sure  
25 it's not in people's gardens, make sure that



1  
2 people aren't close to it. So there is a lot  
3 going on.

4 MR. SCHARF: There has been health  
5 studies doen by the state, all around the state,  
6 making sure of the grade of sampling.

7 And you've just got to keep in mind,  
8 you've heard of PCBs too, how ubiquitous it was  
9 in terms of use before 1975; almost every  
10 refrigerator had capacitors in it that had  
11 PCBs in it, dishwashers, washing machines. Even  
12 back, dating to the 1960s and before, automatic  
13 transmissions in cars used, as part of this  
14 hydraulic fluid PCBs. I'm not sure of the exact  
15 date of that. But as we realized that this  
16 material didn't break down and had residual  
17 effect, that we had to stop using it, and to the  
18 best of our ability worked to clean that up, but  
19 unfortunately you may find it in certain areas,  
20 you may find that if you look hard enough.

21 MR. SIMONELLO: I appreciate what you're  
22 doing, but you've got to appreciate what we're  
23 going through and our frustration; okay.

24 MR. SCHARF: You know, I grew up on Long  
25 Island, I've been drinking this water, I raised

1  
2 my own kids here. I understand that. I  
3 graduated Stony Brook, I know this is a very  
4 important issue, and the cancer question that  
5 Bill has talked about on Long Island is a  
6 paramount issue because it's apparently a  
7 concern, like it is everywhere else in the state,  
8 but there are certain elevated numbers, if I'm  
9 correct.

10 MR. GILDAY: Increased incidences.

11 MR. SCHARF: And that's a concern. And  
12 knowing that vinylchloride, the main contaminant  
13 concerned, is a known carcinogen is a paramount  
14 issue, and that's why Kevin is here to present  
15 the plan, that we don't ever want that material  
16 to be exposed, and its for the protection of  
17 human health and the environment. And we found  
18 that this chemical can be easily oxidized, and  
19 that's what the whole program is that EPA is  
20 putting forth here.

21 MR. YATZYSHYN: My name is Greg Yatzyshyn.

22 I, too, remember these two people when we  
23 demonstrated at Hooker Chemical in 1981, and as  
24 excited as you are about what you see coming out  
25 their ground, my daughter was nine years old,

1  
2 she's 28 year old and married, and we're sitting  
3 here right now. This is what we're talking  
4 about when we talk about our confidence in  
5 government at this point.

6 I understand that you probably use the  
7 full disclosure law in having Ruco or Hooker or  
8 Occidental Petroleum let me know where the  
9 situations are, where the problems were, any  
10 type of chemicals that they used, the amounts of  
11 chemicals, and the list goes on. I read on the  
12 web site the summary your conclusion, I read all  
13 of that, and unfortunately, like I was saying  
14 earlier, you kind of beat us, you beat us to the  
15 point where we got tired of waiting and they  
16 figured we would go away, and we did, pretty  
17 much. And now we're here again. And I threw  
18 away most of the stuff; I don't know if anybody  
19 has ever seen. Has anybody ever seen this,  
20 anybody that's working on the project?

21 This is a book from 1980, it was down by  
22 NYPER, and it's called Toxics on Tap, Chemical  
23 Contamination of Long Island's Drinking Water.  
24 This was a 1980 book. So anything that you're  
25 telling us is certainly not a bulletin to us;

1  
2 all right?

3 My question is, and I'm sorry I threw  
4 away everything, I really did, I threw out a lot  
5 of things in disgust. But my recollection has  
6 three laytex tanks being buried on the site.  
7 Are you familiar with that?

8 MR. LYNCH: Yes.

9 MR. YATZYSHYN: Was that remediated?

10 MR. LYNCH: Yes, they have been removed.

11 MR. YATZYSHYN: I'm trying to do this  
12 from memory now, I'm talking, you know, 20 years  
13 and 30 pounds later. I'm trying to do a lot of  
14 this from memory, but what I will do later, but  
15 that's really all-- oh.

16 My other question was is Bethpage and the  
17 other water districts, are they prepared for any  
18 situations that might arise? Is this going to  
19 be a strangle, is there going to be a problem  
20 down the road that they are not ready for if it  
21 affects this plume traveling into their drinking  
22 water?

23 MR. LYNCH: Bethpage has three of their  
24 wells have treatment on the wells already  
25 designed for the contamination that is here,

1  
2 together with the IRM that the state is doing,  
3 and then the action we will take, monitoring  
4 programs will continue to try to track and  
5 assure that things are not moving any further  
6 once these things are operating, and we're in  
7 communicate with them and they have all of our  
8 data. So there are things-- everyone will know,  
9 anyone who can you be affected, before they  
10 would be affected.

11 MR. GILDAY: And what the state is going  
12 to be proposing shortly, and I don't want to  
13 steal Steve's thunder here, but there are  
14 contingency plans if water district wells are  
15 threatened that there needs to be some type of  
16 treatment ready to go, and typically what we do  
17 is a sentinal new or sentry wells between what  
18 we know to be the plume in those wells so we'll  
19 see it as it's approaching and have time to  
20 implement the program.

21 MR. YATZYSHYN: Would the Lloyd still be  
22 protected for, let's say, Long Beach? I  
23 understand that the Lloyd is protected for Long  
24 Beach? I understand that the water is protected  
25 for Long Beach and all of these other lower

1  
2 areas where the salt water intrusion is a  
3 problem. Would that ever be a consideration,  
4 not to protect them, just to make it available?

5 MR. LYNCH: I don't think I quite got  
6 your question.

7 MR. YATZYSHYN: In other words, the Lloyd  
8 is protected for other areas that have salt  
9 water intrusion, okay, so that's going to be  
10 their access to drinking water. Is there any  
11 type of contingency plan to allow anybody else  
12 to tap that aquifer?

13 MR. LYNCH: That I don't know. That  
14 would be a question for the state.

15 MR. GILDAY: Not specifically, but it is  
16 an aquifer that is available, but it's so deep  
17 to go down there it would be quite an  
18 expenditure for a district to do. But I know  
19 it's there.

20 As far as depth, that is one thing that  
21 we consider; we want to profile this contamina-  
22 tion at depth, we don't just want to capture it  
23 at 300 feet and find later on, oops, it slid by  
24 at 400 feet. So we make sure that our  
25 monitoring is down at that depth so that we

1  
2 capture the plume both horizontally and  
3 vertically.

4 MS. SIMONELLO: Knowing the background of  
5 this property I could never understand how they  
6 could build those senior citizen developments on  
7 the Grumman campus that you referred to, and now  
8 you're talking about contaminated soil. Was it  
9 considered when they built that, by Sunnyside?

10 MR. SCHARF: I think that even though  
11 that question really isn't relevant to the  
12 program of Ruco, but that's something-- that  
13 would be referred to as the south end of the  
14 runway of the Grumman property, and the  
15 contamination that we're dealing with here is in  
16 the groundwater, deeper; low visibility solvents  
17 that are moving offsite in the groundwater.

18 MS. SIMONELLO: But you mentioned the  
19 air, that some of the stuff went into the soil

20 MR. SCHARF: The area where they built  
21 the former Grumman parcel, that property was  
22 sold in order to build the homes, and that was  
23 never used for industrial purposes. And I'm not  
24 up on all of it, but there was extensive testing  
25 done to show that that would meet criterion for

1  
2 residential development before it was released  
3 to do that. I wasn't working on the project at  
4 that time, it was approved, but I or Bill can  
5 find out more answers for you on that question.  
6 There was a meeting held with the citizens that  
7 live in that community and there was a lot of  
8 data was a assembled.

9 MR.GILDAY: Well, basically there's  
10 another thing. Over the years, as various parts  
11 of the facility was closed out, another thing  
12 was happening concurrently with that. Pieces of  
13 the property were deemed clean after certain  
14 studies had been done to make sure that they  
15 were indeed clean, and they were delisted from  
16 the state's inactive hazardous waste site  
17 registry. Those pieces, before they were de-  
18 listed, the State Health Department and D.E.C.  
19 looked at certain aspects of it to make sure if  
20 there was any question, is the sampling data  
21 there to verify the fact this is a property  
22 that's suitable for a residential development.  
23 In that particular case it was a delisting  
24 petition and we denied the first one, we said  
25 make sure you've done soil testing, we knew that



1  
2 the ground water contamination was deep, in fact  
3 it's below the water table at that point, so  
4 that wasn't an issue of exposure there, and the  
5 the public water to the people would be provided  
6 What we said, there are certain chemicals that  
7 are used maybe for deicing planes, different  
8 glycols, we wanted to make sure that those were  
9 checked, and those were tested first, and when  
10 we looked at the data and was satisfied that  
11 there was nothing there we went ahead with the  
12 delist. So there was special testing done in  
13 that particular area, as with other areas around  
14 the property that have been delisted and are  
15 being developed even as we speak.

16 MR. SCHARF: The groundwater there is  
17 about 50 feet below grade, and that property is  
18 now south of where this groundwater reception  
19 program is, and the area that you're talking  
20 about, I think it's called Parcel 01; is that  
21 correct, Bill?

22 MR. GILDAY: There's different parcels.

23 MR. SCHARF: In that area there are two  
24 onsite containment wells that never had very  
25 high concentrations to date, and the ground-

1  
2 water in wells in that area, the shallow  
3 groundwater wells are all cleaned up. So  
4 there's no route of exposure to anyone in those  
5 homes.

6 And that's where that lies. But again,  
7 that's not part of this site. If you want to  
8 put more questions on that you should come month  
9 the next meeting, to the Northrup Grumman  
10 proposed plant, the overall regional groundwater  
11 program, and you can ask more of the questions  
12 on both Northrup-Grumman and Navy at that time.

13 MR. ANDRIOLA: My name is John Andriola,  
14 I live at 64 New South Road in Hicksville,  
15 right up the street from where Hooker Chemical  
16 is.

17 Now, first of all I'd like to ask you  
18 when you say that you test samples of ground,  
19 how far down do you go with the testing? Just  
20 at the subsurface, or down--

21 MR. GILDAY: It depends on how we were  
22 concerned the contamination got in the certain  
23 place; it was from either spillage or deposition  
24 from the wind, say the question that came up  
25 earlier, we would check the surface first.

1  
2 MR. ANDRIOLA: But you don't go down a  
3 hundred feet?

4 MR. GILDAY: We'll go down as far as we  
5 need to until we get clean.

6 MR. ANDRIOLA: Okay.

7 MR. GILDAY: In fact we asked a number of  
8 people from Grumman about that, if we have  
9 contamination and it's not found at that depth  
10 we say go down deeper until you find the bottom  
11 of it.

12 MR. LYNCH: In these places where you see  
13 the monitoring wells put in we also monitor the  
14 soil all the way down.

15 MR. ANDRIOLA: And the wells are anywhere  
16 from 580 to 640 feet in depth down below; okay?  
17 Now, since 1976 you say up until 1985, or  
18 whatever, they were putting pollutants into this  
19 here water. Eventually that has to go down into  
20 the water table. Furthermore, they built this  
21 big water tower on Grumman property; are you  
22 familiar with that?

23 MR. GILDAY: Sure.

24 MR. ANDRIOLA: I think that the amount of  
25 gallonage is a million 800 thousand gallons of

1  
2 water. Now, where are they pulling that water  
3 from?

4 MR. SCHARF: The water in those tanks, I  
5 believe that the water in the tank is from the  
6 tank on New Grumman Road on the former Grumman  
7 property. Those come from the Bethpage Water  
8 District Wells.

9 MR. ANDRIOLA: But it's only a short way  
10 from Hooker Chemical.

11 MR. SCHARF: I'm not sure exactly where  
12 their supplyline was.

13 MR. ANDRIOLA: I know, I live there.

14 MR. SCHARF: But it's not on the Hooker  
15 property.

16 MR. ANDRIOLA: It's the underground  
17 water is pulling from that there area.

18 Second of all, when they monitor the  
19 purity of water, who does the monitoring of  
20 this? Is it a private company, is it the water  
21 district themselves?

22 MR. GILDAY: That's actually a good  
23 point.

24 MR. ANDRIOLA: The purity of the water;  
25 that's what I want to know.

1  
2 MR. GILDAY: The water districts in Long  
3 Island, actually I mentioned in 1976 we started  
4 monitoring, we could finally see these chemicals  
5 at lower levels, by 1980 Nassau County, and I  
6 believe Suffolk County, had a requirement that  
7 monthly or-- I'm sorry, quarterly monitoring was  
8 required for these chemicals from every public  
9 water supply well in the different counties.  
10 And that monitoring has been going on since  
11 then, at Bethpage in particular, we've got the  
12 quarterly monitoring data, we can see if there's  
13 any chemicals or not in the water. When there  
14 is a problem, some contamination, the county is  
15 required-- that's also, I should say in 1989  
16 that became a state regulation, that quarterly  
17 monitoring must be done to these supply wells.

18 You have an excellent water program, both  
19 in Nassau and Suffolk County. They had  
20 implemented what later, nine years later, became  
21 the state regulation. They go beyond that now.  
22 If there's contamination in any water supply  
23 well the county will require of the districts,  
24 they will require monthly monitoring of those  
25 affected wells, and if there's treatment on the

1  
2 well, that monthly monitoring has to include  
3 after the treatment, usually it includes the  
4 before and after so we can see that the  
5 treatment is being effective. At Bethpage,  
6 because of the issue between the contamination  
7 from Navy/Grumman, and also the water district,  
8 there's joint monitoring going on, both the  
9 water district and Grumman and the Navy will do  
10 different monitoring events.

11 MR. ANDRIOLA: You can understand where  
12 I'm coming from.

13 MR. GILDAY: Right.

14 MR. ANDRIOLA: With the water table being  
15 pulled up there.

16 MR. GILDAY: Sure.

17 MR. ANDRIOLA: And another thing. From  
18 the place where they removed all the soil, what  
19 did they go down; 20 feet. And with this  
20 contamination for the last 40 years, how can 20  
21 feet of soil being removed clean up that site?

22 MR. LYNCH: Well, it doesn't clean up the  
23 site, it's just a small portion of what's being  
24 done there.

25 MR. ANDRIOLA: And another thing. Along

1  
2 107, across from Waldbaum's shopping center,  
3 there's a sump there, I see green water  
4 constantly coming out those big sewer lines.

5 Oh, incidentally, it's nine people who  
6 died from cancer; okay?

7 And Miss Nickol, you're right on track,  
8 your putting a moratorium on the building here  
9 on that Underhill property; don't back off,  
10 don't let them take it. I know you're opposed  
11 to it.

12 MR. DEVINE: I know you mentioned PRPs.

13 MR. LYNCH: The potential responsible  
14 parties?

15 MR. DEVINE: Right.

16 Who owned or operated actual usage or  
17 transporting property.

18 MR. LYNCH: Right.

19 MR. DEVINE: Is Bethpage property  
20 considered an economic development area?  
21 Because like there are areas of Nassau County  
22 that are considered EDAs. I never knew though  
23 it was considered an area that say Stephen  
24 Spielberg wants to take over. Are PRPs  
25 contingent-- like if this goes on for the next

1  
2 ten years, is everyone going to stay clear of  
3 that property, for economic purposes, in order  
4 to avoid being liable to clean up that property?

5 MR. LYNCH: Actually no. What we do--  
6 that's actually a very good question-- it's one  
7 that has bothered people and it has prevented  
8 people from nominating sites on the National  
9 Priority List for that reason. But what we will  
10 do on a site, on the National Priority List  
11 site, if someone wants to come in and develop  
12 the site, which do encourage, what we will do,  
13 we will sign an agreement with them, what we  
14 call a prospective purchaser agreement, that we  
15 will not hold them liable for the clean-up at  
16 the site. Usually what-- when we do that we  
17 also get something back from them, which would  
18 be access to the site, which would be permission  
19 to monitor all the different wells, they usually  
20 do monitoring themselves, sometimes they'll  
21 volunteer to clean up a portion of the site.  
22 But it is something that has been encouraged,  
23 very much so, recently by the Environmental  
24 Protection Agency is that we do want to  
25 redevelop these sites, these sites that have



1  
2 been contamination, you don't want to take a  
3 fresh parcel of land and use that, and potential  
4 problems even come to that. These are great  
5 sites to reuse for industry. So we do try to  
6 limit the liability to anyone who will be taking  
7 over the site.

8 MR. ANDRIOLA: Thank you.

9 THE CHAIRMAN: Does anybody have any  
10 questions about how we propose to take up  
11 vinylchloride?

12 MR. SIMONELLO: I don't know if you can  
13 answer this question, but the U.S. Navy was  
14 supposed to come down and clean up the site, the  
15 108 acres on the Grumman property. Whatever  
16 became of that? Last year we went to a meeting  
17 and there was three different phases, residen-  
18 tial, commercial and industrial that they were  
19 going to clean up. Did anything ever come of  
20 that?

21 MR. SCHARF: Are you referring to the  
22 Remedial Advisory Board meeting that the Navy  
23 put on at their facility?

24 MR. SIMONELLO: Yes.

25 MR. SCHARF: That is ongoing right now,

1  
2 and the current plan is that the Navy wants to  
3 give the property to Nassau County, and they are  
4 going through different scenarios of industrial  
5 versus residential use, and if I'm correct, I  
6 think they settled on industrial use of the  
7 property?

8 MR. GILDAY: I think so. We're still  
9 looking at it.

10 MR.. SIMONELLO: But are they going to  
11 clean it up before they try to sell it?

12 MR. SCHARF: They have been in the  
13 process of cleaning up the site, and they've  
14 done a very good job of-- they've emptied out  
15 all the toxic chemicals in the building, they  
16 removed soil beneath the building, they  
17 installed-- over the last ten years the Navy  
18 has been making judgment on what's going on at  
19 the Grumman site; they put monitoring wells in,  
20 they've been monitoring groundwater, they've  
21 addressed the recharge basins in the back, the  
22 PCB contamination on some areas of the site, and  
23 those areas that still require remediation have  
24 been earmarked to stay under Navy ownership. So  
25 the entire facility is not slated, at this time,

1  
2 to be turned over the Nassau County.

3 MR. GILDAY: There will probably be site  
4 use restrictions on that parcel and limiting it  
5 to either commercial or light industrial or  
6 industrial use in general. Now, that doesn't  
7 mean that gross contamination will be left,  
8 typically what happens is you attack any of the  
9 really bad contamination, you get it, as much as  
10 feasible-- there will be residuals, perhaps it  
11 will be 20 feet down, it will be 10 feet down,  
12 it may be near the surface, and what we will  
13 often do when it gets into the development  
14 question, there will be deed restrictions, deed  
15 notifications, there will be what we call  
16 institutional controls, literal documents that  
17 we file with the county and town clerks, whoever  
18 has jurisdiction, that every property owner will  
19 know about that, that contamination is there,  
20 and the state would have to be involved in any  
21 plan to dig that up.

22 MR. SCHARF: Also, any time you have an  
23 industrial facility like that, and as large as  
24 that facility was, as active as it was, there's  
25 always a possibility, as detailed as the

1  
2 investigation we do and an intensive as has been  
3 performed, there's always a possibility that  
4 some old tank that may have gone unidentified or  
5 whatever, and the Navy is required, by law, to  
6 come back and take care of any problems found on  
7 the site after the fact, and they make no bones  
8 about it. As long as there's a country there's  
9 going to a Navy, so that's not a problem, and  
10 that's the key.

11 But again, these are questions really  
12 that we should hold off to the Navy public  
13 meeting that's coming up.

14 MR. ANDRIOLA: I'm concerned with the  
15 groundwater right now.

16 MR. SCHARF: Right. Well, the  
17 groundwater, there's contamination on the Navy  
18 site, there's no two ways about the groundwater,  
19 and we're aware of it, and that's going to be  
20 part of the overall program that we're going to  
21 have.

22 MR. DEVINE: You mentioned disposing or  
23 regenerating carbon. What's that's all about?  
24 How do get rid of it or whatever? What's the  
25 point of that? Because they're actually talking

1  
2 about, you know, I read about the Hanford  
3 Nuclear Waste Site, where they want to start  
4 regenerating plutonium and stuff like that. Is  
5 this a good thing that they're talking about,  
6 disposing or regenerating carbon?

7 MR. LYNCH: This is a typical thing  
8 that's done when you're using carbon to treat  
9 either groundwater or an air problem. You can  
10 either dispose of it in a secure landfill, or  
11 what you can do is you can put it through a heat  
12 process that would drive the volatile organics  
13 that adhere to that carbon, drive them off and  
14 then incinerate them so that you can reuse that  
15 carbon again. It's not something that would be  
16 done at the site, it is removed and done in a  
17 separate facility that's designed just to do  
18 that. So it's actually a good thing, it's  
19 actually recycling the carbon for further use.

20 MR. DEVINE: Which process is that?

21 MR. LYNCH: That's the process where you  
22 would take the carbon, you would drive off the  
23 the volatiles with the heat and incinerator;  
24 that would be the regeneration of the carbon.

25 MR. GILDAY: Can I just add?

1  
2 For IRM at the Grumman facility, that is  
3 actually happening on site; right, Steve?

4 MR. SCHARF: When the carbon is full of  
5 these chemicals, to extract those chemicals back  
6 off the carbon into a, still basically a  
7 separator, and that's where you can actually see  
8 the TCE coming out in that process.

9 MR. DEVINE: Is that going on where the  
10 four stacks are?

11 MR. GILROY: Well, that's the co-gen  
12 facility, that's where power generation occurs.  
13 That's off of South Oyster Bay Road right at the  
14 fork.

15 MR. DEVINE: That's a power generator?

16 MR. GILDAY: Yes, right.

17 MR. SCHARF: It generates steam there.

18 MR. GILDAY: Right; but steam is used in  
19 the Grumman facility.

20 MR. ANDRIOLA: I have one more question.

21 On trichlorethylene, now we have this  
22 trichlorethylene in our water supply  
23 (indistinct). Now, we have this  
24 trichlorethylene in our water supply. Now, is  
25 this carbon filtration also taking this trichlor

1  
2 out of the water?

3 MR. LYNCH: The air striping takes the--  
4 he's asking what takes the trichlor out of the  
5 water, and the carbon striping is what takes it  
6 off the air that has come from the water into  
7 the air, you take it and capture it in that  
8 carbon.

9 (Indistinct)

10 MR. LYNCH: Actually, basically, it ends  
11 up in the carbon, yes. It comes from the ground  
12 water and where it ends up is in that carbon and  
13 then it's removed from the carbon and disposed  
14 of.

15 MR. ANDRIOLA: And that came from Hooker?

16 MR. LYNCH: It came from all of them.

17 MR. PFAENDER: I'm Rich Pfaender, I'm  
18 representing Supervisor Venditto.

19 Question. This remedial alternative  
20 deals with the DCM subsoil.

21 MR. LYNCH: Right.

22 MR. PFAENDER: Biosparging, it's a new  
23 technology. Is there a track record on this  
24 technology working in other areas, number one,  
25 and number two, since the water districts,

1  
2 specifically Bethpage and Hicksville, are the  
3 districts that are involved, have you had  
4 comments on this preferred alternative from  
5 those water districts, either positive or  
6 negative?

7 MR. LYNCH: We have not had any comments  
8 yet from the water districts, we expect them.

9 It is a new technology, it is being used  
10 in a number of places, one Superfund site, I'm  
11 trying to think of the name of it up in New  
12 England, in Massachusetts, it's been used  
13 effectively, but we haven't had any programs yet  
14 where we have completed it and said yes, it is  
15 done and what went into the plume is gone.

16 MR. PFAENDER: So is that the reason you  
17 put the contingency plan into place to go to  
18 alternative 2, which would be to pump the water  
19 out?

20 MR. LYNCH: That's exactly why we did it.

21 MR. PFAENDER: It's a "safety net." How  
22 far will you go with the biosparging before you  
23 decide that, A, it is not being effective in a  
24 timely manner, and then proceed to your conting-  
25 ency plan?



1  
2 MR. LYNCH: We don't have a hard time-  
3 frame yet, what we'll do is look at the design,  
4 and we'll design a time which we'll work through  
5 there will also be plenty of monitoring wells  
6 downgrading from the vinylchloride, and if the  
7 vinylchloride does reach those monitoring wells,  
8 we will definitely, at that point, show that it  
9 is not working, that it's reaching high levels,  
10 continuing downgrading, we would put the  
11 contingency in.

12 MR. PFAENDER: Will there be a  
13 notification to local municipalities that you  
14 are going to do the contingency plan?

15 MR. LYNCH: Yes, we would, we would send  
16 out a notice to anyone on the mailing list.  
17 What we will be sending out, we will be sending  
18 out a notice of progress when we are starting  
19 the air sparging, and then if we do change it at  
20 all we would also, then, be putting out a  
21 mailing saying that we are changing it.

22 MR. SCHARF: With an explanation.

23 MR. LYNCH: Well, we wouldn't have to.

24 What Steve is referring to is that if we  
25 do change, if we change the remedy that we

1  
2 select in certain ways, we don't necessarily  
3 have to redo the ROD we put out, what we call an  
4 Explanation of Significant Difference. Since  
5 this is a contiguous that is selected we don't  
6 have to do that, we would do it in the normal  
7 course of business, send out a notification that  
8 we're moving to the next phase.

9 MR. SCHARF: And the other thing to keep  
10 in mind is that the vinylchloride is substituted  
11 for VCM, it's called VCM by Occidental because  
12 they use it in monitoring to make products that  
13 may be produced by a breakdown of the products,  
14 as it's moving in the groundwater, in the  
15 natural flow, it's moving towards the on-site  
16 containment wells that Grumman has put in, and  
17 there was always a bone of contention between  
18 the two companies there, originally Grumman was  
19 saying two years and Occidental was saying seven  
20 years, and then Grumman said Occidental was  
21 there 40 years and Grumman said ten years, so  
22 somewhere in there it has moved down to deeper;  
23 the rate of flow is slower there, so it's easier  
24 to monitor and track the path. So if nothing  
25 else happens and the biotransformation fails, it's

1  
2 going to move in towards those wells, and if  
3 necessary, treatment can be put on the air  
4 stream of the on-site containment wells to treat  
5 it at that point. But we have a lot of time to  
6 think about it, it's not going to be tomorrow.

7 MR. PFAENDER: There's a follow-up on  
8 your answer.

9 The responsible party here would then  
10 still be Occidental if the biosparging didn't  
11 work and remediation had to take place closer to  
12 the Grumman site and Bethpage, would this burden  
13 them revert back after a number of years still  
14 to Occidental to pick up the tab?

15 MR. SCHARF: That's an enforcement issue.

16 MR. LYNCH: I would say this Vinyl-  
17 chloride plume has been identified with the Ruco  
18 site, and the responsibility for that  
19 Vinylchloride--

20 MR. PFAENDER: Whatever need to be done.

21 MR. LYNCH: Occidental will be the  
22 potentially responsible party for that.

23 MR. SCHARF: And keep in mind there are  
24 other contaminants that knows no bounds, and  
25 they came from Occidental, and a lot more came

1  
2 from the Navy and Grumman site, that is along  
3 commingled. So that's under the Grumman  
4 facility. Right now Grumman is treating for all  
5 of that, we know that's moving off their site,  
6 and that's something that you have to keep in  
7 mind that's all been an issue in dealing with  
8 the regional remedy, and that's based on the  
9 remedy for the regional ground water the state  
10 will present that will rectify all that because  
11 it will make sure that it will protect the  
12 health and environment with those remedies we  
13 have in place.

14 MR. ARMENTANO: John Armentano.

15 With the biosparging is there a depth  
16 threshold? These are organisms that are  
17 breaking down the VCMs. Is there a depth  
18 threshold that they can survive at?

19 MR. SORENSON: I'm Kent Sorenson, I'm  
20 with the Idaho National Engineering  
21 Environmental Lab, I'm an environmental  
22 engineer.

23 Surprisingly, it's been in the last ten  
24 years that there's been a lot of research on  
25 subsurface microbiology an what sort of

1  
2 organisms can live underground. It's actually  
3 been discovered, primarily by researchers at  
4 Cornell, that these microorganism can live as  
5 deep as 3,000 feet or more below land surface,  
6 so they can live very deep, and there is  
7 evidence at this site that there is biological  
8 activity at least to the bottom of the plume  
9 where wells are completed. So you're not going  
10 to run into a depth limitation from a biology  
11 standpoint.

12 MRS. TREDER: I'm Karen Treder from the  
13 New York State Department of Motor Vehicles.

14 We have a facility in Hicksville,  
15 presently in the Hicksville-Bethpage ares.

16 On 52 of the map where it says Plant 5B  
17 has any water or soil samples been taken in that  
18 area?

19 MR. LYNCH: Yes, there have been water  
20 samples that have been taken deep below that  
21 area, and the plume of contamination does extend  
22 underneath that area.

23 MRS. TREDER: Is it vinylchloride?

24 MR. LYNCH: No; this would be the plume  
25 containing the perchlorethylene and the tri-

1  
2 chlorethylene.

3 Steve, would you know if there were any  
4 soil samples taken in that area?

5 MR. SCHARF: I believe on the Grumman  
6 property itself, the area your talking about is  
7 Plant 5B, that's a residential and commercial  
8 area?

9 MRS. TREDER: Yes.

10 MR. SCHARF: And offhand I don't know,  
11 Bill, maybe you know if there was sampling done  
12 there.

13 MR. GILDAY: I don't know exactly how  
14 close to the basins or around the basins;  
15 there's been at least a number of testing  
16 samples there, but the Plant 5 closure included  
17 a lot of soil samplings around the facility, and  
18 I know it was far enough to the south that I was  
19 satisfied they had gone far enough. I know the  
20 Plant 2, there was a delist petition several  
21 years ago for Plant 2, as part of that there  
22 were soil samples collected around Plant 2, even  
23 prior to that.

24 MRS. TREDER: I'm talking about the west  
25 side.

1  
2 MR. GILDAY: Yes, yes; on all sides of  
3 the plant.

4 And prior to that there was a lot of soil  
5 sampling and I know soil vapor sampling. One of  
6 the things with PCB, it's a volatile chemical,  
7 and if you have significant, what we call source  
8 areas, by sniffing the gas, basically, you can  
9 put a probe down in the ground and you can  
10 sniff, you don't sniff it physically, but maybe  
11 some people do, but you actually take specific  
12 types of chemistry, if you find it in the soil  
13 vapor you will know that you have a source near  
14 there and then you take the soil samples and  
15 find the actual source. That was done in  
16 conjunction with soil sampling around the Plant  
17 2 facility, around Plant 5, actually across many  
18 of plants on the property. So there's been a  
19 lot of different samplings done.

20 As part of the closure, those plants are  
21 going to be used by Grumman for awhile. When  
22 they're ready to close those out there will be  
23 another round of sampling at that area.

24 If there was a source area, it's been  
25 remediated. If it was near the surface, if

1  
2 there were surface levels near the surface it's  
3 been remediated. If it were deeper, and I don't  
4 believe there were any deeper things there with  
5 respect to soil sampling, north of there there's  
6 an area of leach pools that served Plant 5, and  
7 that contamination has been remediated at least  
8 down to 10 foot depth and backfilled. That's  
9 going to be noted in one of the deed restric-  
10 tions that I mentioned earlier for the Plant 5  
11 closure.

12 So the state has looked at it, we're  
13 satisfied with the work that's been done, with  
14 the controls that are going on.

15 MRS. TRADER: (Indistinct)

16 MR. GILDAY: Yes; as those pools are  
17 closed they will. But right now there part of  
18 actually the IRM.

19 MRS. TRADER: What's the IRM?

20 MR. GILDAY: That's the containment of  
21 the large plume at the southern boundary, the  
22 pumping wells.

23 MS. ECHOLS: Can we take a five minute  
24 break for the stenographer?

25 MR. DEVINE: I just want to ask a



1  
2 question.

3 Who mailed these out.

4 MS. ECHOLS: I did.

5 MR. DEVINE: You did?

6 Because the one I received was missing  
7 pages 2-- every other page was missing, so it  
8 wasn't a complete thing to read, it was  
9 incomplete.

10 Thank you for your time.

11 MR. LYNCH: Thanks for telling us about  
12 that.

13 (Recess)

14  
15 MR. LYNCH: We're ready to resume.

16 If anyone has anymore questions or some  
17 more comments. Especially we're looking for  
18 comments on the proposal that we have for the  
19 vinylchloride plume, if we could concentrate on  
20 that we'd appreciate it.

21 Steve said there will be a public meeting  
22 on the groundwater plume sometime, I think it's  
23 in the next month. So if we can concentrate the  
24 questions on the vinylchloride I would  
25 appreciate it.

1  
2 MR. SIDOWSKI: I'm Joseph Sidowski, I  
3 live in Hicksville.

4 You have a cutoff date of the 28th for  
5 anyone putting papers in?

6 MR. LYNCH: It's for comments on this  
7 proposed plan.

8 MR. SIDOWSKI: Okay. Comment only.

9 Can that dated be extended?

10 MR. LYNCH: Yes, it can.

11 MR. SIDOWSKI: I'm now asking that date  
12 to be extended for at least 15 more days.

13 MR. LYNCH: Okay. We'll have that in the  
14 transcript; and we can extend that date.

15 Could I ask you to write that in a  
16 letter, just so we put it on the record. It's  
17 real easier for me to have a paper trail.

18 MR. SIDOWSKI: Who do I send it to?

19 MR. LYNCH: You send it to the name  
20 that's in the plan which I buried someplace.

21 MS. ECHOLS: It's right here. It's on  
22 the second page.

23 MR. LYNCH: Project Manager, New York  
24 Remediation Branch.

25 MR. SIDOWSKI: I'll see if I got it in

1  
2 the other book.

3 MR. LYNCH: I'll give you this one.

4 MR. SIDOWSKI: Do I direct it to you?

5 MR. LYNCH: You can direct it to me.

6 MR. SIDOWSKI: I have one other comment.

7 I did state to you that the information  
8 is off, the evidence is conflicting inside of  
9 the report itself, and according to Rule 9 of  
10 the Federal Court of procedure, I have to notify  
11 you of that at it's hearing, because you, then,  
12 therefore, have to follow Rule 9.

13 Thank you.

14 MS ECHOLS: Any more questions from  
15 anyone?

16 MRS. TUECHLER: I just want a clarifica-  
17 tion of the 2,000 acres that you mentioned that  
18 were contaminated, the plume of water.

19 MR. SCHARF: That's based on the area  
20 below ground surface where there's contaminated  
21 water.

22 MRS. TUECHLER: Below ground surface.

23 MR. SCHARF: And below, most of it is  
24 below the water table.

25 MR. LYNCH: It would be the plume of

1  
2 contaminated water that lies below granite.

3 MR. SCHARF: And keep in mind, too, that  
4 the magnitude of this site, in terms of depth,  
5 width, the concentration varies greatly, and it  
6 took me a long time to get all the information  
7 as a layperson looking at this, what it all  
8 means, so there's a lot involved here and it's  
9 is not an easy task to understand all the  
10 information. But when we say 2,000 acres, it's  
11 basically the extent of the groundwater con-  
12 tamination we found, starting at Occidental, the  
13 Ruco facility and going all the way down past  
14 the Bethpage Water District.

15 VOICE: For the next hearing related to  
16 the Grumman property, will there been another  
17 mailing similar to the one you put out this  
18 time?

19 MR. SCHARF: What we'll have to do is  
20 coordinated with the EPA, because I'm starting  
21 to draft a news letter, and we'll have to put a  
22 mailing out, and it gets quite extensive. As it  
23 is, we have a mailing-- I'm not sure, what did  
24 you do with the mailing, did you take a map?

25 MS. ECHOLS: It was a mailing that was

1  
2 given to me. I have updated it as much as  
3 possible.

4 MR. SCHARF: What we can do is ask the  
5 EPA for a copy of that. At the minimum I can  
6 take a copy of who attended the meeting tonight.

7 We will also require that Grumman put out  
8 a public notice in the newspaper, and maybe  
9 given the magnitude of that site we might make a  
10 radio announcement on it. We'll probably hold  
11 that meeting in Bethpage, at the Bethpage High  
12 School.

13 We have certain small points we want to  
14 resolve, and hopefully resolve that in the next  
15 couple of weeks, in the early part of September.  
16 What that will do is will bring together all  
17 these things.

18 MR. LYNCH: I want to thank everybody for  
19 taking the time to come out tonight.

20 If you have any other comments or  
21 questions don't hesitate, please, to write to  
22 us; the address is in that handout you have.  
23 Thanks again.

C E R T I F I C A T E

STATE OF NEW YORK )  
 ) ss.  
COUNTY OF NEW YORK )

I, JULES REHFELD, a Shorthand  
(Stenotype) Reporter and Notary Public  
of the State of New York, do hereby  
certify that the foregoing  
Proceedings, taken at the time and  
place aforesaid, is a true and correct  
transcription of my shorthand notes.

I further certify that I am neither counsel for nor related to any party to said action, nor in any wise interested in the result or outcome thereof.

IN WITNESS WHEREOF, I have  
hereunto set my hand this 18th day of  
August, 2000.

Jules Rehfield  
JULES REHFIELD

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